



Railcar Market Update

TrinityRail

September 2016

Macroeconomic Indicators

Slow Economic Growth Has Become New Normal

- **GDP Growth Up 1.1% in Q2 2016**
 - Consumption growth propping up economy while investment has struggled.
- **Employment Still Short of Pre-Recession Standards**
 - The unemployment rate is 4.9%, almost at full employment. The U6 rate (unemployed, marginally attached, or working part-time for economic reasons) has remained at 9.7%, about 1.7% higher than the pre-recession lows.
- **ISM Manufacturing Index Shows Small Contraction in August – Growth Likely to Return in Fall**
 - Recent manufacturing trends have switched to consumer products rather than energy.
- **Stability in Value of the U.S. Dollar Supporting Exports**
 - Indicators show renewed interest in U.S. goods (e.g., grains and chemicals) from foreign buyers, but the value of the dollar remains elevated. Robust export growth unlikely until the dollar falls back to normal levels.
- **Housing Starts Reach Over 1.2 million in August to Continue Slow Improvement**
 - Still nearly 1 million builds below pre-recession highs, though multifamily builds are at largest level since 1980s.

U.S. Rail Traffic

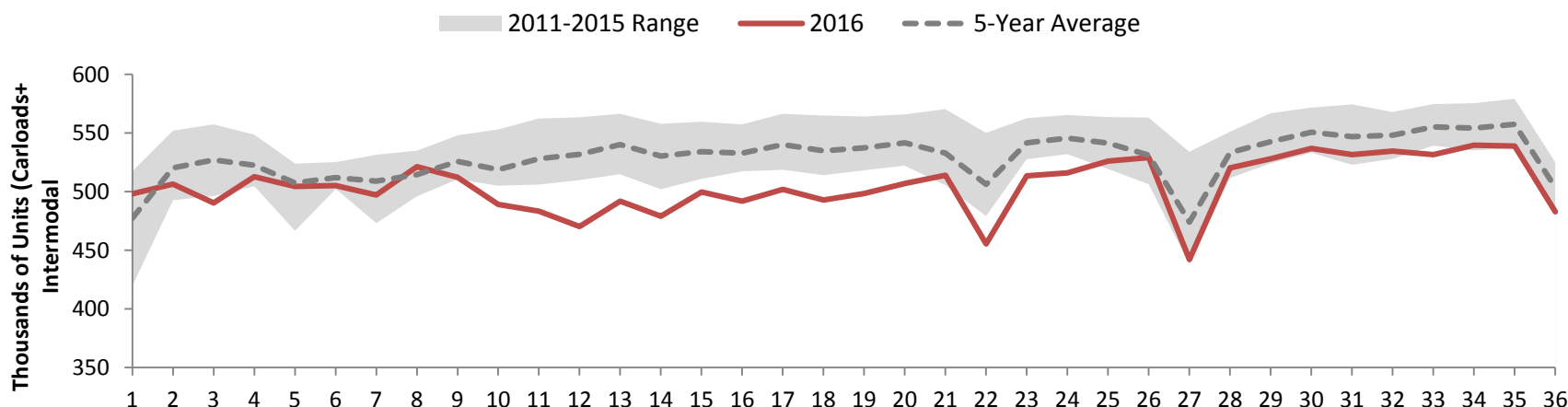
Coal and Crude Oil Carloads Weigh Heavily on Overall Traffic

- Through 36 weeks, total traffic is down 7.1% in the United States compared to 2015
- When coal and petroleum & petroleum products carloads are removed, total traffic is down 2% in the United States compared to 2015
- Agriculture & food products, chemicals, coke, and motor vehicles & parts have all been positive y/y

Weekly U.S. Total Rail Traffic

(Carloads + Intermodal)

Source: AAR

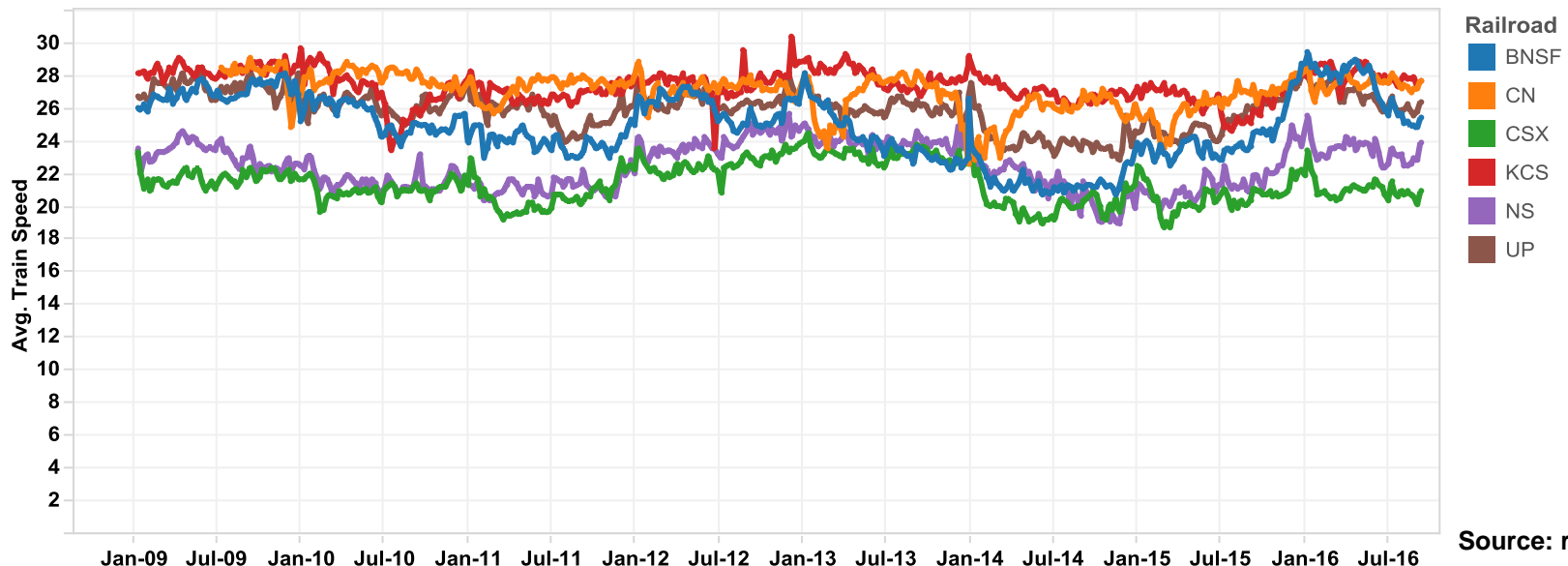


Train Speeds

Train Speeds Accelerate Due to Low Traffic and Recent Railroad Investment

- Train speeds have remained elevated in 2016 with the highest velocities across the railroads since 2013
- Dwell times dropped through the first half of the year in conjunction with increased train speeds, but have started to increase over the summer as rail traffic has started to pick up

2009-2016 Average Train Speeds (in MPH)

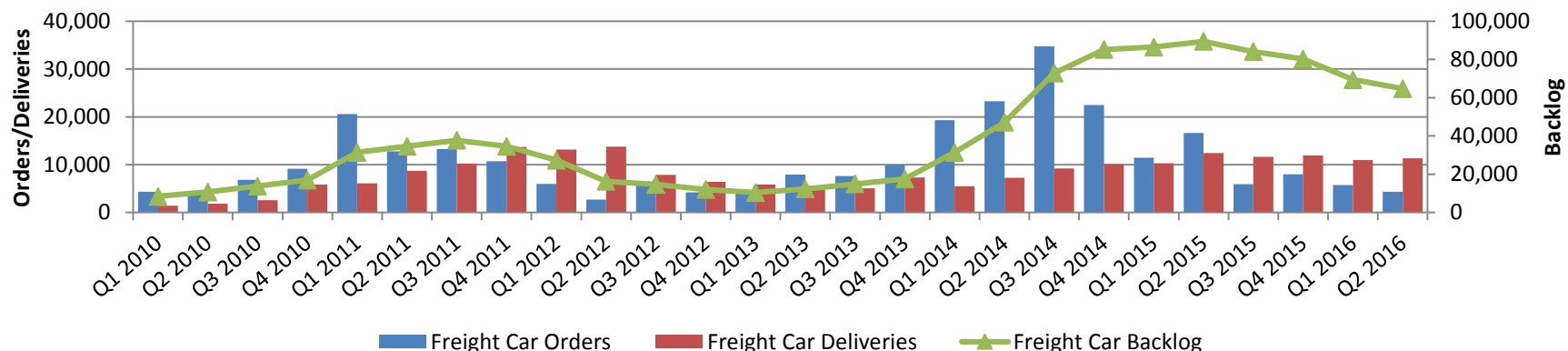


Source: railroadpm.org

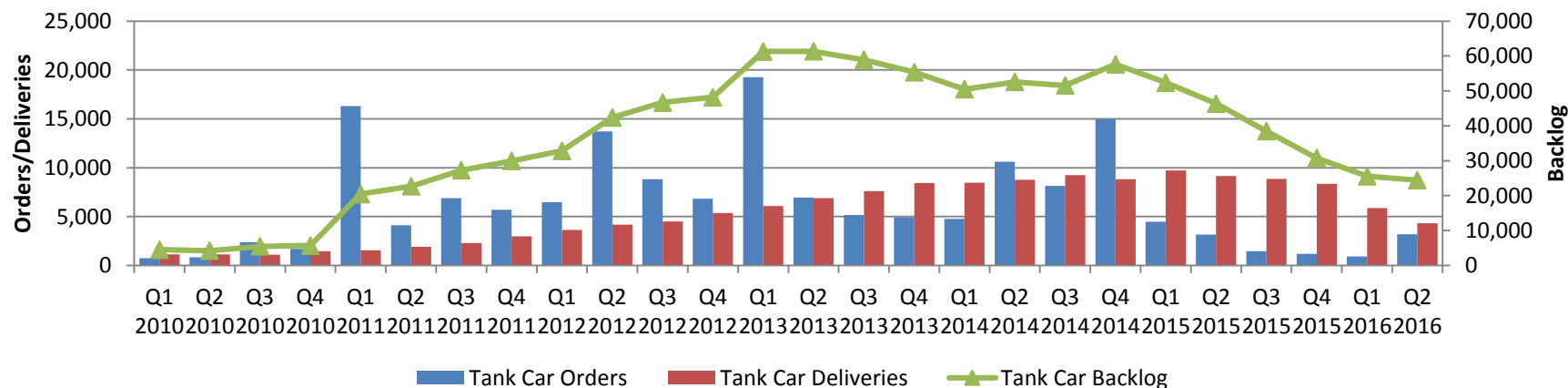
Railcar Orders, Deliveries, and Backlog

Orders and Deliveries Slow After Record Totals During Shale Boom

Freight Car Orders, Deliveries, and Backlog



Tank Car Orders, Deliveries, and Backlog



Railcar Delivery Forecast

Reduced Demand Expected to Lead to Fewer Deliveries

	2016	2017	2018	2019	2020
Freight Car Deliveries	36,684	26,400	26,900	32,000	36,900
Tank Car Deliveries	19,985	18,800	15,100	15,800	17,700
Total Railcar Deliveries	56,669	45,200	42,000	47,800	54,600

Source: FTR

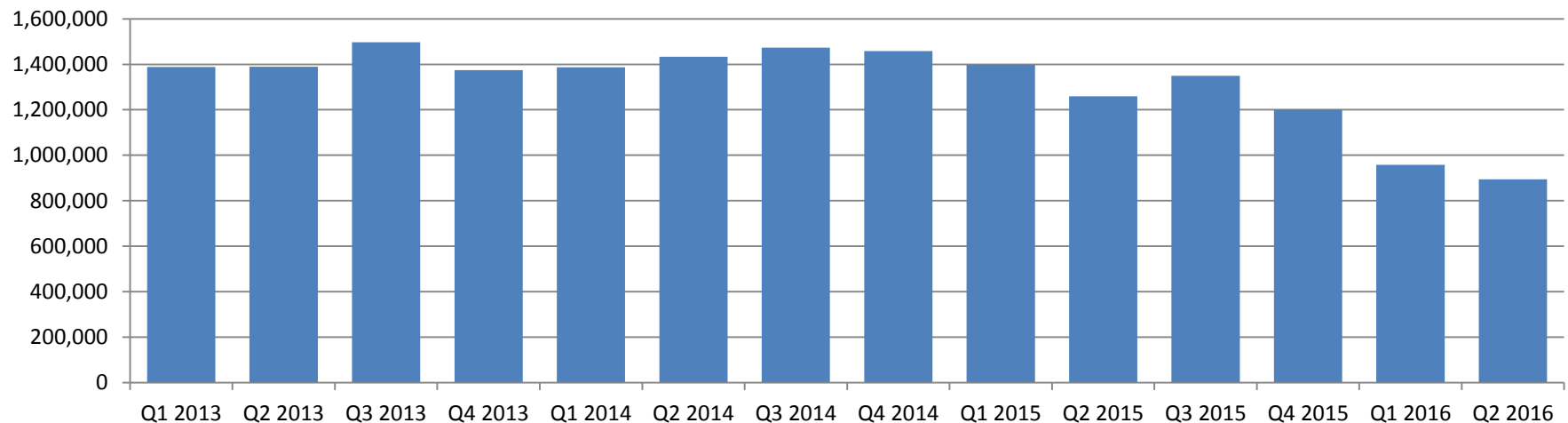
- Railcar deliveries are expected to slow down through 2018 before returning to a stronger production total in 2019
- Limited open hopper and gondola demand relating to coal movements will be a key reason freight car deliveries are not expected to reach pre-recession totals
- Tank car delivery is expected to be strong by historical standards, but well off the production pace during the shale boom

Coal

Coal Market Hit Bottom in Spring – Rebound to Stay Below Recent Norms

- Total traffic is down as coal plant closures, low natural gas prices, and warm winters have negatively weighed on coal movements
- 25% of open hoppers and gondolas are currently in storage
- The EIA is forecasting improved coal production in 2017 as a colder winter and higher natural gas prices are expected to make coal more competitive

Class I Coal Carloads Terminating on Class I RRs



*STCC Codes starting with 11

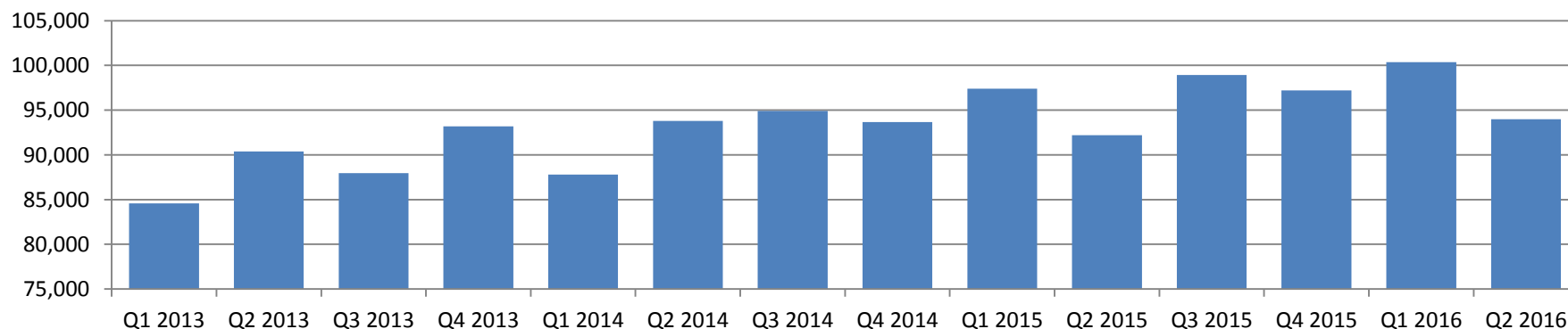
Source: STB

Biofuels

Steady Growth in Biofuels Unlikely to Significantly Dent Current Tank Car Oversupply

- Ethanol production and carloads are expected to continue to grow as the EIA mandate continues to increase
- Low marine rates and smaller than expected differentials between corn and co-product prices have led to a drop in DDG carloads since 2014
- The EIA forecasts a 3% increase in U.S. biodiesel production in 2017
- Ethanol's share of finished gasoline consumption is forecasted to remain at 10% in 2017.

Ethanol Carloads Terminating on US Class I RRs



**STCC Codes starting with 28184*

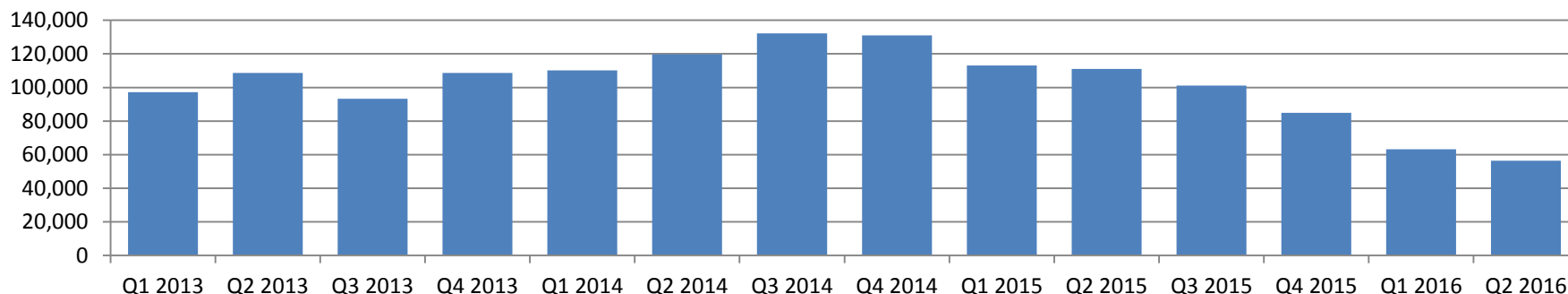
Source: STB

Crude Oil, Petroleum Products, and NGLs

CBR Outlook Grim – Downstream Products and NGLs Have Upside

- U.S. crude by rail movements have dropped by over 50% from their peak
- Reduced crude oil prices, a narrowed WTI/Brent margin, and lower production out of North Dakota's Williston Basin have driven the downturn in crude by rail
- The Dakota Access Pipeline is likely to take away more share from crude by rail when finally completed
- Natural gas liquids could see growth in the near-term with a colder winter expected
- Class I carloads of distillates are up 15% and heavy-end refined products are up 26% compared to last year

Crude Oil Originations on US Class I RRs

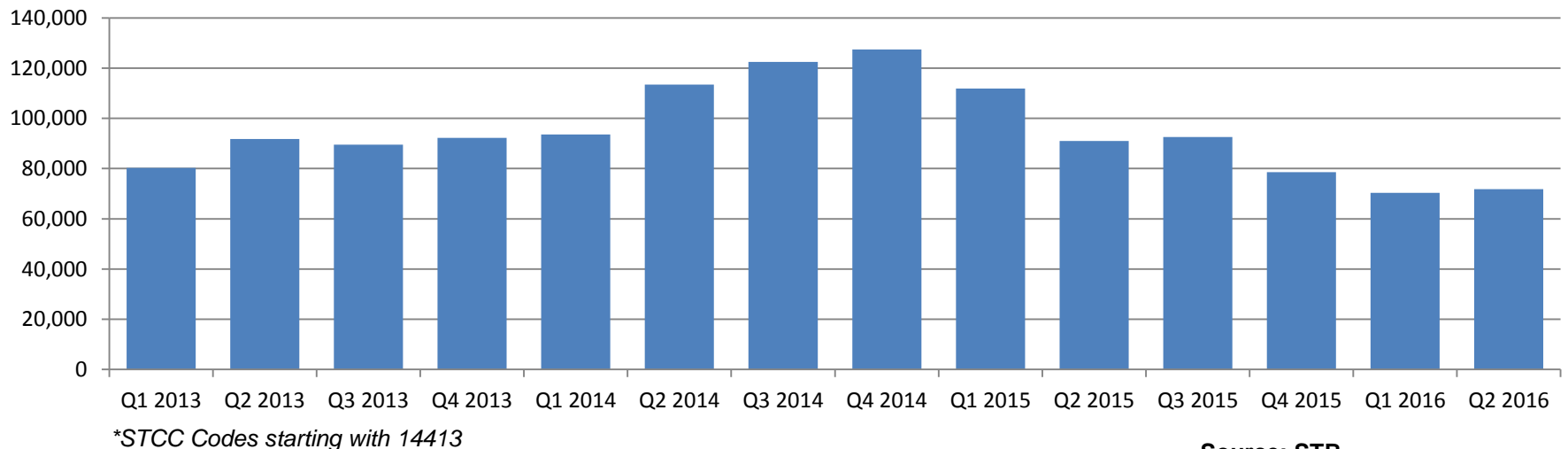


Frac Sand

Frac Sand Market Carries Potential Strength with Drilling Trends

- Industrial sand deliveries hit the bottom in Q1 2016 and gained 2% in Q2 despite lower rig count and crude oil production
- The spread of high intensity drilling is driving up frac sand demand and will allow the market to rebound before the crude oil market
- A large frac sand shipper quoted an idle equipment rate at about 40% in March, but have pulled cars out of service since

Industrial Sand Deliveries on Class I RRs



Source: STB

Regulatory Review

- **Transport Canada Protective Direction No. 38, 7/13/2016**
- **DOT/PHMSA HM-251C, 8/15/2016**
- **Open Topics**
 - **Modification Requirements for Existing CPC-1232 Jacketed Tank Cars**
 - **ECP Brake Requirements**

